

## SECTION 29

### GORE AREAS ON BRIDGES

#### 1.29.1 GENERAL CRITERIA

- a. Page 1.29-3 establishes guidelines for reserve area for the possible installation of impact attenuator devices in gore locations.
- b. Guide rails and bridge rails are designed to handle glancing blows. Head on vehicular impacts which occur at gore areas may cause serious damage to vehicles or injury to motorists.
- c. The development of cushioning, or energy dissipating devices are required in front of hazardous fixed objects.
- d. The sketch on Page 1.29-3 shows dimensions to be used in determining if adequate space is available for installation of an impact attenuator device. The Table on page 1.29-3 shows a range of dimensions the significance of which is as follows:

##### Minimum

Restricted Conditions - These dimensions approximately describe the space required for installation of the current generation of impact attenuator devices without encroachment on shoulders and with the nose of the device offset slightly back of the parapet or shoulder line.

However, there are impact attenuators that will not fit in the space provided by these dimensions.

Unrestricted Conditions - These dimensions should be considered as the minimum for all projects except for those sites where it can be shown that the increased cost for accommodating these dimensions, as opposed to those for restricted conditions, will be unreasonable.

(For example, if the use of the greater dimensions would require the demolition of an expensive building or a considerable increase in construction costs, then the lesser dimension might be considered).

##### Preferred

These dimensions, which are considerably greater than required for the present generation of impact attenuator devices, should also be considered optimum.

There is no intention to imply that if space is provided in accordance with these dimensions that the space will be fully occupied by an impact attenuator device. The reason for proposing these dimensions is so that,

if experience shows that devices should be designed for greater ranges of vehicle weights and/or for lower deceleration forces, there will be space available for installation of such devices in the future. In the meantime, the unoccupied reserved impact attenuator space will provide valuable additional recovery area.